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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/683,582  | 01/22/2002  | Danny L. Beasley     | 218063US25CO        | 4130             |
| 22850   | 7590        | 12/03/2003           | EXAMINER            |                  |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.<br>1940 DUKE STREET<br>ALEXANDRIA, VA 22314 |             |                      | DINH, DUNG C        |                  |
|   |             | ART UNIT             | PAPER NUMBER        |                  |
|   |             | 2153                 | 14                  |                  |
| DATE MAILED: 12/03/2003   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                              |  |  |
|------------------------------|------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b>       | <b>Applicant(s)</b>  |  |
|                              | 09/683,582                   | BEASLEY ET AL.<br> |  |
|                              | <b>Examiner</b><br>Dung Dinh | <b>Art Unit</b><br>2153  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 09 September 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-27, 29-42 and 44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-27, 29-42, 44 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \*    c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                               | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

**DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/28/2003 has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 27, 29, 30-36, 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over PolyCon/XS Matrix Control Unit (prior art submitted by applicant - paper #4) and further in view of Masahiko Japan patent JP406284118A.**

As per claim 27, the PolyCon/XS is a system for connecting a workstation (console) to a plural remote computer systems comprising:

a first device for receiving a first set of electronics signals produced by a user input device [see fig.3 of Example#2 - the port on the Polycon/XS that connects to a remote controller];

communication link for carrying information corresponding to the first set of electronic signals [the cable that would be connected from the port on the Polycon/XS to the remote controller];

a crosspoint switch [the Polycon/XS switching unit] including a number of outputs [the ports for connecting to remote computers to be controlled];

a plurality of second communication links [cables that connect the remote computers to be controlled to the Polycon/XS] that carry signals produced by the input device to a selected computer and video signal from the selected computers to the crosspoint switch.

The Polycon/XS provides support for remote consoles to control the switch with each console able to command the switch to select a computer to be controlled (see Example#3). Hence, it is inherent that the Polycon/XS system has video link (in the cable) from the switch to the display of the remote console in order to

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display on the console the screen of the computer being control, and commands for controlling the switch to select a computer to be controlled is transmited to the switch via the communication link (cable connecting the switch to the remote controller) since that is the only link connecting the remote console to the switch.

The Polycon/XS as described in the catalog does not specifically disclose signal conditioning devices connected to the switch, console and the computers. It is well known in the art to have signal conditioning devices to amplify and reshape signal to enable transmission over long cables. Masahiko, for example, teaches a conditioning circuit to suppress jitter to enable transmission of the signal in a long distance cable. It would have been obvious for one of ordinary skill in the art to have signal conditioning devices at the switch and the computers because it would have enable usage of longer cables for connecting the computers to the switch; hence extending the distance between computers and switch.

As per claim 29, it is rejected under similar rationale as for claim 27 above. The Polycon/XS receives command sending from the user input device for commanding the switch to select a remote computer [see Polycon Mangement System, the software].

As per claims 30-36, it is well known in the art that computer video output has red, green and blue and synchronization

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signals. It is well known in the art that to encode horizontal and vertical synchronization signals are encoded on at least one of the red, green and blue signals prior to transmission. It is apparent that the Polycon/XS system has provides the red, green and blue video encoded with the synchronization signals before transmitting to the switch. It would have been obvious for one of ordinary skill in the art to do so because it would have enabled the video signal to be transmitted over longer cable. It is apparent that the synchronization signals polarities would have been encoded in the transmission signal in order for the receiving end to decode and extract the synchronization signals.

As per claim 38-40, the Polycon/XS system has input device comprises keyboard and mouse [see page 1 of the catalog]. The keyboard and mouse data are transmitted from the workstation [control console] to the computer being controlled.

**Claims 37, 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over PolyCon/XS Matrix Control Unit and Masahiko above and further in view of Choi et al US patent 5,673,087.**

As per claims 37, 41-42, the Polycons/XS as described in the catalog does not specifically disclose onscreen programming circuit. Choi teaches a device with circuit for producing an on

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screen display (OSD) which overlays the display screen with menu and cursor control. The circuit enable simplify operational control of the device without having dedicated remote function keys on the controller [col.6 lines 25-36]. It would have been obvious for one of ordinary skill in the art to modify the Polycon/XS device to have OSD circuitry because it would have simplified operational control of the switch by enabling the control of the switch without having a CPU at the remote console to run the MS-Windows graphic shell and the management software or dedicated keypad on the remote controller.

**Claims 1 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over PolyCon/XS Matrix Control Unit (prior art submitted by applicant - paper #4) and further in view of Choi et al. US patent 5,673,087.**

As per claims 1, and 44, The PolyCon/XS is a switching system essentially as claimed having plural computer-side connectors and plural user-side connectors for connecting mouse, keyboard and analog video signals. The PolyCon lacks the analog video overlay circuitry to create on screen menu for controlling the switch. Choi teaches a device with circuit for creating on screen display with menu to simply operational control of a device [col.6 lines 34-37]. The circuit enable simplify

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operational control of the device without having dedicated remote function keys on the controller [col.6 lines 25-36]. It would have been obvious for one of ordinary skill in the art to modify the Polycon/XS device to have OSD circuitry because it would have simplified operational control of the switch by enabling the control of the switch without having a CPU at the remote console to run the MS-Windows graphic shell and the management software or dedicated keypad on the remote controller.

**Claims 2-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over PolyCon/XS Matrix Control Unit and Choi and further in view of Bladley et al. US patent 5,309,564.**

The PolyCon/XS reference does not disclose details of signals transmission. Bladley, in similar field of invention, teaches a switching system for remote usage of computers which transmits analog video from remote computer with synchronization signals encoded on the components of the computer RGB video signals. It would have been obvious for one of ordinary skill in the art to apply the transmission encoding method of Bladley to the PolyCon/XS system because it would have enable the signals to be transmitted over longer distances. It is apparent that the system as modified would have connectors, decoder and encoder circuitry.

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***Claim Rejections - Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claims 1, 27, 29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patents 6,345,323.**

Although the conflicting claims are not words or words identical, they are not patentably distinct from each other because the current claimed limitations are claimed in the patent above.

|  |                                     |
|--|-------------------------------------|
| claim 1 of the present application:  | US patent 6,345,323                 |
| switching system comprising:   | claim 1 - central crosspoint switch |
| computer-side connectors...  | crosspoint switch's outputs         |
| a first set of user side connectors including ... input device connector and ... | crosspoint switch's inputs          |

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|   |   |
|---|---|
| video connector ...                         |   |
| a first analog video receiving circuit ...  | claim 2 - second signal conditioning units receive video signal |
| a first analog video processing circuit ... | claim 8 - onscreen programming circuit                          |
|   |   |

|   |   |
|---|---|
| claim 27 of the present application:                  | US patent 6,345,323   |
| a system for connecting a workstation ...             | claim 1 - a system for connecting a numbers of workstations |
| a first signal conditioning device ...                | a plurality of first signal conditioning units              |
| a first communication link ...                        | a plurality of first communication links                    |
| a crosspoint switch ...                               | a central crosspoint switch                                 |
| a plurality of second communication links ...         | a plurality of second communication links                   |
| a plurality of second signal conditioning devices ... | a plurality of second signal conditioning units             |
| an analog video link processing circuit...            | claims 5-8  |

As per claim 27, the patent 6,345,323 does not claim a second set of electronic signal via the first communication link for controlling the crosspoint switch. However, the limitation would have been obvious in view of the patent's claim 8 so as to enable the user to send command to the crosspoint switch in conjunction with the onscreen programming display.

As per claim 29, it is rejected under same rationale as for claim 27 above.

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**Claims 1 and 44 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent 6,112,264.**

Although the conflicting claims are not words or words identical, they are not patentably distinct from each other because the current claimed limitations are claimed within the patent.

|  |                                   |
|--|-----------------------------------|
| claim 1 of the present application:  | US patent 6,112,264               |
| switching system comprising:   | claim 1 - A switching system      |
| computer-side connectors...  | computer-side interface           |
| a first set of user side connectors including ... input device connector and ... video connector ... | user-side interface               |
| a first analog video receiving circuit ...   | an analog video receiving circuit |
| a first analog video processing circuit ...  | an analog video overlay circuit   |
|  |                                   |

|   |  |
|---|--|
| claim 44 of the present application:    | US patent 6,112,264                      |
| A video switch ...                      | claim 1 - A switching system             |
| an on-screen display processor ...      | an analog video overlay circuit          |
| a user input device decoder circuit ... | claim 16 - keyboard command detector ... |
|   |  |

**Claims 1 and 44 are rejected under the judicially created doctrine of obviousness-type double patenting as being**

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**unpatentable over claims 1 of U.S. Patent 5,884,096.** Although the conflicting claims are not words or words identical, they are not patentably distinct from each other because the current claimed limitations are claimed within the patent.

|  |                                  |
|--|----------------------------------|
| claim 1 of the present application:  | US patent 5,884,096              |
| switching system comprising:   | claim 1 - a programmable switch  |
| computer-side connectors...  | a second interface circuit       |
| a first set of user side connectors including ... input device connector and ... video connector ... | a first interface circuit        |
| a first analog video receiving circuit ...   | "routing video signals"          |
| a first analog video processing circuit ...  | an on-screen programming circuit |
|  |                                  |

|   |  |
|---|--|
| claim 44 of the present application:    | US patent 5,884,096  |
| A video switch ...                      | claim 1 - a programmable switch  |
| an on-screen display processor ...      | an on-screen programming circuit   |
| a user input device decoder circuit ... | a programmed logic circuit ... operating to detect keyboard or cursor control device signals ... |
|   |  |

**Claims 1, 27, 29, and 44 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8 of US patent 5,721,842.** Although the conflicting claims are not words or words identical, they are

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not patentably distinct from each other because the current claimed limitations are claimed within the patent.

|  |                                      |
|--|--------------------------------------|
| claim 1 of the present application:  | US patent 5,721,842                  |
| switching system comprising:   | claim 8 - a programmable switch      |
| computer-side connectors...  | a second signal conditioning circuit |
| a first set of user side connectors including ... input device connector and ... video connector ... | a first signal conditioning circuit  |
| a first analog video receiving circuit ...   | "routing video signals"              |
| a first analog video processing circuit ...  | on-screen programming circuit        |
|  |                                      |

|   |   |
|---|---|
| claim 27 of the present application:                  | US patent 5,721,842                                       |
| a system for connecting a workstation ...             | claim 8 - a system for connecting a workstation           |
| a first signal conditioning device ...                | a first signal conditioning circuit                       |
| a first communication link ...                        | inherent for connection to the workstation                |
| a crosspoint switch ...                               | a programmable switch                                     |
| a plurality of second communication links ...         | inherent for connection to the remotely located computers |
| a plurality of second signal conditioning devices ... | a second signal conditioning circuit                      |
| an analog video link processing circuit ...           | on-screen programming circuit                             |

|   |   |
|---|---|
| claim 29 of the present application:          | US patent 5,721,842                                       |
| a system for connecting a workstation ...     | claim 8 - a system for connecting a workstation           |
| a first signal conditioning device ...        | a first signal conditioning circuit                       |
| a first communication link ...                | inherent for connection to the workstation                |
| a crosspoint switch ...                       | a programmable switch                                     |
| a plurality of second communication links ... | inherent for connection to the remotely located computers |

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|  |   |
|--|---|
| a plurality of second signal conditioning devices ...  | a second signal conditioning circuit  |
| wherein the first signal conditioning device further ... for controlling the crosspoint switch ... | means for transmitting the keyboard and cursor control devical signals ... in order to control the operation of the programmable switch |
|  |   |

|   |  |
|---|--|
| claim 44 of the present application:  | US patent 5,721,842  |
| A video switch ...  | claim 8 - a programmable switch  |
| an on-screen display processor ...<br>a user input device decoder circuit ... | an on-screen programming circuit<br>means for detecting the keyboard and cursor control device signals |
|   |  |

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Dinh whose telephone number is (703) 305-9655. The examiner can normally be reached on Monday-Thursday from 7:00 AM - 4:30 PM. The examiner can also be reached on alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached at (703) 305-4792.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group 2100 Customer Service whose telephone number is (703) 306-5631.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, DC 20231

**or faxed to: (703) 872-9306**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (Receptionist).



Dung C. Dinh  
Primary Examiner